



उत्पाद मैनुअल
निकेल पाउडर— व शष्टि
IS 7506: 1987 के अनुसार

**Product Manual for
Specification for Nickel Powder
According to IS 7506: 1987**

व भन्न उत्पादों के लए भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन) वनियम, 2018 की योजना- I के तहत प्रमाणन के संचालन में एकरूपता और पारदर्शिता के लए इस उत्पाद मैनुअल का उपयोग सभी क्षेत्रीय / शाखा कार्यालयों और लाइसेंसधारियों द्वारा संदर्भ सामग्री के रूप में किया जाएगा। दस्तावेज़ का उपयोग बीआईएस प्रमाणन प्राप्त करने के इच्छुक संभावित आवेदकों द्वारा भी किया जा सकता है।

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure uniformity of practice and transparency in operation of certification under Scheme-I of Bureau of Indian Standards (Conformity Assessment) Regulations, 2018 for various products. The document may also be used by prospective applicants desirous of obtaining BIS certification.

1.	भारतीय मानक संख्या IS No.	:	IS 7506:1987
	शीर्षक Title	:	Specification For Nickel Powder
	संशोधनों की संख्या No. of amendments	:	Nil
2.	नमूना दिशानिर्देश Sampling Guidelines		
a)	कच्चा माल Raw material	:	No specific raw material requirement Note: This section indicates the requirements for raw material (if specified in the IS) for which compliance is to be established during Grant of Licence/Change in Scope of Licence/Factory Surveillance
b)	समूहीकरण दिशानिर्देश Grouping Guidelines	:	Sample of any average particle size may be taken to cover all particle size manufacturing in the factory. However, scope of licence with regards to sizes shall be restricted based upon manufacturing capability.

c)	नमूने का परिमाण Sample Quantity	:	500 grams Note: This section indicates the quantity of the sample of the product and/or the raw material (if applicable), required to be sent to the laboratory for testing, for the purpose of Grant of Licence/Change in Scope of Licence/ Factory Surveillance (in case of market surveillance, effort may be made to procure the required quantity of product sample, as far as possible since raw material sample may not be available in market)
d)	परीक्षण अनुरोध में घोषित कए जाने वाले पैरामीटर Parameters to be Declared in Test Request	:	Average Particle Size Note: Apart from the above, any other requirements/parameters may also be declared as per the standard, as applicable.
3.	परीक्षण उपकरणों की सूची List of Test Equipment	:	Please refer to Annex- A
4.	निरीक्षण और परीक्षण की स्कीम Scheme of Inspection and Testing	:	Please refer to Annex- B
5.	एक दिन में संभावित परीक्षण Possible tests in a day		
	All Tests can be carried out in a day Note: This section is for the guidance of BIS Certification Officers/Technical Auditors of BIS Authorized Outside Surveillance Agencies (OSAs) during factory inspection to provide ready reference regarding the tests which can be witnessed during the inspection in the factory by the officer/auditor.		
6.	लाइसेंस का दायरा / Scope of the Licence:		
	7506:1987 के अनुसार मानक मुहर का उपयोग करने के लिए लाइसेंस निम्न लखत कार्यक्षेत्र के लिए प्रदान किया जाता है Licence is granted to use Standard Mark as per IS 7506:1987 with the following scope:		
7.	उत्पाद का नाम Name of the product		Specification For Nickel Powder
	Average Particle Size		2 μm to 7 μm or any other size

ANNEX – A

LIST OF TEST EQUIPMENTS
(INDICATIVE LIST, FOR GUIDANCE ONLY)

Sl. No.	Tests Used in with Clause Reference	Test Equipment/Chemicals and Identification Numbers (Where applicable)
1.	Chemical Composition, cl.3, Table-1 (Ni, Fe, Zn, Co, Cu, S, Si, Na, K, Ca, C)	Instrumental methods Inductively coupled plasma atomic/optical emission (ICP-OES), Inductively coupled plasma mass spectrometry (ICP-MS), Requisite Standard Solution Standard Reference Materials with Certificate
2.	Hydrogen loss, cl 3.2 and Table-1	Hydrogen, Nitrogen/ Argon. Laboratory Balance (LC 0.1 mg) Electrically Heated Tubular Furnace, Gas light tube of quartz or other refractory material, Thermocouple (LC 5 deg C), Boat, Supply unit with pressure gauge Or any other established instrumental method like LECO Combustion Analyzer etc.
3.	Average Particle Size, cl 4	Fisher Sub Sieve Sizer, Jewel Calibrator Tube, Balance (LC 0.001 g)

ANNEX B

SCHEME OF INSPECTION AND TESTING

1. QUALITY ASSURANCE PLAN

1.1 It is expected that manufacturers (licensees/applicants) will implement a Quality Assurance Plan i.e. a plan of regular testing and in-process controls, designed to ensure that the product bearing the Standard Mark conforms to all requirements of the Indian Standard.

1.2 The manufacturers shall define a Quality Assurance Plan defining the control unit (i.e. lot/batch etc.) and the levels of control (i.e. the frequency and number of samples for conducting the different tests as per the Indian Standard) and submit the same to BIS Branch Office for information. The manufacturer shall comply with the same and maintain test records in accordance with para 2.4.

1.3 RECOMMENDED LEVELS OF CONTROL/CONTROL UNIT:

1.3.1 For the guidance of manufacturers, the recommended definition of control unit is: For the purpose of this scheme, entire quantity of Nickel Powder of the same average particle size manufactured on the same line in one go shall be taken as one control unit.

1.3.2 For the guidance of manufacturers in preparing the Quality Assurance Plan, recommended levels of control are given in **Table 1**.

1.3.3 The manufacturer shall ensure inspection and testing as per the Quality Assurance Plan submitted by them on the whole production of the factory which is covered by this plan. Alternatively, the manufacturer has the option of adherence to the quality plan as per levels of control recommended in column 3 of Table 1.

1.4 However, all manufacturers shall ensure compliance of their products to all the requirements of the Indian Standard.

2. ENSURING COMPLIANCE THROUGH TESTING- It is expected that manufacturers (licensees/applicants) will establish a suitably equipped and staffed in house laboratory (In house testing facility) for testing at least those parameters of the Indian Standard which require routine testing for ensuring quality of the product. This includes in-process controls as may be defined and put in place by the manufacturer and testing parameters/requirements which can only be performed in the factory.

2.1 For the guidance of manufacturers, Table 1 giving the recommended levels of control is given below. Column 2 of Table 1 indicates routine tests where test equipment is required in house as “R” or other tests which can be subcontracted as “S”. Subcontracting is permitted to BIS recognized/empanelled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025.

2.2 For MSME manufacturers, the requirement of maintaining a laboratory/in-house testing facility for routine tests (indicated as “R” in Column 2 of Table 1) is also optional.

2.2.1 MSME manufacturers may utilize common cluster based facilities as per guidelines for the utilization of cluster based test facilities by MSMEs or the provisions of Sharing of testing facilities or get testing done from BIS recognized/empanelled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025.

2.3 Large Scale manufacturers shall maintain an in-house laboratory equipped at least with test facilities for routine tests (indicated as “R” in Column 2 of Table 1), where different tests given in the specification shall be carried out in accordance with the method given in the specification. They shall also implement a calibration plan for the in-house test equipment.

2.3.1 Alternatively, in lieu of an in-house laboratory, large scale manufacturers can also utilize the provisions of Sharing of testing facilities as per the Guidelines for Grant of Licence available on BIS website www.bis.gov.in. (Under Conformity Assessment>Product Certification Process). Even for subcontracted tests, provisions for sharing of testing facilities can be utilized.

2.4 TEST RECORDS- The manufacturers maintaining an in-house laboratory or utilizing common cluster based facilities or shared test facilities shall maintain test records for the tests carried out to establish conformity. For the tests being subcontracted to BIS recognized/empanelled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025, test reports issued by the laboratories shall be available for inspection by BIS.

3. PACKING AND MARKING - The Standard Mark as given in the Schedule of the license and Licence Number (i.e. CM/L...) shall be suitably incorporated on each Package of Powder and on the test certificate issued along with each consignment, provided always that the product thus marked and packed conforms to all the requirement of the specification.

3.1 Packing and Marking shall be done as per the Indian Standard.

3.2 **Additional Marking requirements:** The material shall also be marked with the following additional requirement on each Package of Powder:

a) “For BIS certification details please visit www.bis.gov.in”

4. REJECTION - All the production which conforms to the Indian Standard and covered under the scope of this licence shall be marked with the Standard Mark. Disposal of non-conforming product shall be done in such a way so as to ensure that there is no violation of provisions of BIS Act, 2016.

TABLE 1
(ONLY FOR GUIDANCE PURPOSE)

(1)				(2)	(3)		(4)
TEST DETAILS					LEVELS OF CONTROL		
Clause	Requirements	Test Method		Test equipment requirement R: required (or) S: Sub-contracting permitted	No. of Samples	Frequency	Remarks
		Clause	Reference				
3, Table 1	Chemical Composition (Ni, Fe, Zn, Co, Cu, S, Si, Na, K, Ca, C)	3, Table 1	IS 7506 or any established instrumental/chemical method as agreed to between the Purchaser	R	One	Each Lot	—
3, Table 1 & Cl 3.2	Hydrogen Loss	Cl 3 Table 1, Cl 3.2	IS 5644 Part 2 or any other established instrumental method may be used	R	One	Each Lot	—
4	Average Particle Size	Cl 4	IS 7512	R	One	Each Lot	—

Annexure-I

XYZ IRON AND STEEL Company
(Registered office Address and works address)

Test Certificate for Specification for Nickel Powder as per IS 7506:1987

TEST CERTIFICATE NO.

To M/s_____

Dated

We certified that the material described below fully conforms to 7506:1987 Chemical composition and Physical properties of the product as tested in accordance with the Scheme of Inspection and Testing contained in the BIS Certification Marks Licence No. CM/L_____ are as indicated below against each order No.

(PLEASE REFER TO IS 7506:1987 FOR DETAILS OF SPECIFICATION REQUIREMENTS)

TEST RESULTS

Order No. & Date	Control unit No.	Quantity (in Kg)	Chemical Composition (in %)										Hydrogen Loss	Average Particle Size	Remarks
			Ni	Fe	Zn	Co	Cu	S	Si	(Na+K)	Ca	C			

Remarks
Wagon No.
Truck No.

FOR XYZ IRON AND STEEL Company

(It is suggested that size A4 paper be used for this test Certificate)